From: "Gregory, Jim (Houston)" <jfgregory@pbsj.com>

To: "Winkler, Kerry G" <KGWinkler@pbsj.com>, "'Kelly Williams" <KRWilliams@...
CC: "Tim Smith" <tjsmith@mbakercorp.com>, "Niles, Heather L" <HLNiles@pbsj...

Date: 11/3/2004 5:14 PM

Subject: RE: Wetlands discrepancies for E and F-1

From what I understand of our discussion a week or so ago, Kerry, there are "more" wetland acres from the field effort results than from the aerial photo interpretation results. This is pretty typical and could also be applied to NWI wetland acreages for any particular large scale project. On linear projects, we have seen error in the range of 30% when field delineations are compared to NWI data. In practice, these discrepancies can be attributable to any number of reasons, but my guess in this situation is

- 1. We are talking primarily about PEM wetlands in a changing landscape with variable environmental factors. Depending upon when the wetland delineations take place (and the verification for that matter), marginal uplands can become marginal wetlands and marginal wetlands can become no-doubt wetlands in wetter years. Conversely, in drier years, the opposite can be true. As scientists, we make our best "guess" as to whether something is a wetland or not based on the data we are given. For aerial photos, it's the photo and not much else. The Katy Prairie (including F1) can be extremely wet. My guess is that if we ran delineations in the spring of 1989, 1996 or 1998, we would have even wetter conditions than we are seeing now. I don't recall the date of the photography, but the above NAPP photography (1989 and 1996) is pretty wet stuff and has served us pretty well in the past.
- Aerial photography only shows what it shows. If wetland determinations are done from aerial photographs, the interpreter is at the mercy of the photography. It was not in anyone's scope to conduct field verifications for the aerial interpretation. This is the inherent risk in doing aerial interpretations.
- However, in the NEPA world, it is important to make decisions relative to resource impacts based on the same level of effort (... technology, protocol, etc.) for that resource across the range of alternatives. The crux of the NEPA decision lies in the purpose and need and not necessarily in the amount of impacts associated with a resource. Certainly, a decision can be influenced by the amount of resources impacted within a particular alternative, but that is precisely what we are trying to elicit. The purpose and need establish that the project is justified. The NEPA process will establish whether or not the project is justified when gauged against impacts to all resources. Essentially, it is the argument between accuracy and precision. We may not necessarily want the exact acreage of wetlands (accuracy) for each alternative as interpreted from the aerial photography, but we would like the same protocol for aerial interpretation of wetlands used for all alternatives (precision). The benefit and error - both inherent in the protocol - are the same across the interpretation. If Alternative A is off by 10%, it stands to reason that Alternative B is off by 10% (plus or minus, of course) as the same person, protocol, QA/QC, etc., was applied to the interpretive effort. In this way, selecting the alternative with the least amount of impacts is still possible. Remember, the ROD will establish whether or not the project is feasible given all impacts - not just wetland impacts.

Jim Gregory PBS&J 1880 S. Dairy Ashford Suite 300 Houston, Texas 77077 281-493-5100 / 1047 fax 281-493-3031, x514 direct 713-252-6055 cell

----Original Message----From: Winkler, Kerry G

> AR Sout E+F1

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Sent: Wednesday, November 03, 2004 3:36 PM To: 'Kelly Williams'; Gregory, Jim (Houston)

Cc: 'Tim Smith'; Winkler, Kerry G; Niles, Heather L; 'Robb Fishman

(rfishman@mbakercorp.com)'; 'David Young'

Subject: RE: Wetlands discrepancies for E and F-1

Kelly,

I have spoken to Heather, David, Tim and Robb regarding this issue on various occasions. I have also discussed this issue with Jim Gregory (mine and Heather's supervisor) who is a wetland expert, including aerial interpretation of wetlands.

Unfortunately, the person who was involved with the initial DEIS wetland aerial interpretation is no longer with PBS&J, therefore we do not know the exact details you may be looking for in this situation. Jim can give you his professional opinion overall.

I have expressed our opinions that aerial interpretation of wetlands is not exact and it is to be expected to have differences once you get out in the field. I will let Jim explain this in greater detail. Jim?

Heather did do some quick number crunching for Segment E, the difference in acres was not as significant as what Baker mentioned. Maybe David can send some numbers to us and the source (tables, waters of the US, etc?) and we can make sure we are "comparing apples to apples."

At this time, we are happy to have some brief discussions and do a quick review of the acreage numbers, but creating comparison tables and potential brain-storming meetings may not be necessary.

Once Jim gives some expert advice, I think we will all feel better regarding this issue. Jim, please elaborate.

Thanks Kelly and welcome back and welcome to married-life!

Kerry

----Original Message----

From: Kelly Williams [mailto:KRWilliams@mbakercorp.com]

Sent: Wednesday, November 03, 2004 2:51 PM

To: HLNiles@pbsj.com

Cc: Tim Smith; KGWinkler@pbsj.com

Subject: Wetlands discrepancies for E and F-1

Hi Heather,

I just got back on Monday from my wedding and honeymoon. I am officially the Ball 'n' Chain now! We had a great time and i finally got some rest and sun. The diving was great in Curacao (next to Bonaire), ~150ft visibility. It was gorgeous!

I have been gone for a while and I wanted to touch base with you about the discrepancies in the wetland acreages for E and F-1. I remember discussing this with you and David Young one day before I left. Has anything been done to identify the cause for the differences? Just trying to follow up on this issue. Any info would be appreciated.

Hope all is well with you! How's the new house shaping up???

Thanks,

Kelly